# STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

## **CONFERENCE REPORT**

**PROJECT:** Walpole 14540-U

**DATE OF CONFERENCE:** June 28, 2006

**LOCATION OF CONFERENCE:** Walpole Town Hall

ATTENDED BY: See Attached

**SUBJECT:** Walpole Public Informational/Officials Meeting for the NH 123 over Cold River bridge replacement and Drewsville Retaining Wall modification.

### **NOTES ON CONFERENCE:**

Selectmen Aldrich introduced Bob Landry who explained that this public informational session was the second meeting in a series of meetings to gain the publics input on a transportation project. The main portion of the meeting was to discuss the replacement of the bridge that carries NH 123 over the Cold River. Modifications to the Drewsville sheet pile retaining wall that repaired a slope failure during the October 2005 flood will also be discussed. With the completion of the debris removal under Walpole 14540L project from the Cold River, the Department begins the next phase of gathering the towns input on the best bridge replacement option for the twin concrete arch bridge that carried NH 123 over the Cold River (Br. No. 079/067).

Prior to the flood, NH 123 roadway width in the bridge area had 12' lanes with 4' shoulders for a total width of 32'. The 4' roadway shoulders disappeared shortly after the intersections with Cold River Road (Class VI) and Brewery Road (a dead-end road servicing 4 residences and a commercial gravel operation). The Department recommends NH 123 be replaced with the present minimum standards for the length of the project, a roadway width of 30 feet, with 11 foot travel lanes with 4 foot shoulders. This roadway width would provide for proper maintenance of the roadway and a shoulder for bike or pedestrian traffic. The width of the roadway may be narrowed where needed to minimize adverse right-of-way impacts. The side roads would have minor modifications at their intersection with NH 123. FEMA funding only supports bridge replacement and short bridge approaches.

The Department met with the Selectmen in late February to gather their initial input before any design work was done. The Department now presents design solutions based on the information received at that February meeting. The Department is looking for input on whether it heard correctly and if this is the choice of the town.

Bob first thanked the Selectmen and Elaine Moore for setting up this meeting. Bob Landry next introduced Department staff present at the meeting; Kevin Nyhan Bureau of Environment, John Butler Bureau of Highway Design, Steve Boyington and David Scott Bureau of Bridge Design, and Doug Graham District 4 District Engineer.

Steve Boyington described the previous bridge. It failed due to scouring of the material supporting the pier.

• Bridge Design considered two replacement options.

Twin pre-cast arches
Little change to approaches.
Minor change to intersection with Brewery Road.
Pre-cast arches will show outline of arch.
Spandrel walls could have form liner pattern.

• Butted box beams

Steve Boyington said that he was asked about the cost estimates.

Butted Box, \$125,000.00; Arches, \$150,000.00.

CIP wing walls could have form liners.

#### Other:

- Steel girder bridge could be an option.
- Natural resources agencies would prefer no pier.

Steve Boyington: discussed Drewsville wall:

Immediate response to roadway failure was to drive sheet pile. Current project would make this more permanent by adding walers and soil nails. Project also includes installing a guardrail to the bridge at the ledges.

Kevin Nyhan explained the river restoration plan and DOT's requirements to examine historical and archeological resources. The public is invited to be a consulting party to the 106 process.

Bob Landry discussed:

Right of Way needs. Project is 75% FEMA funded, 25% State.

## **Questions and Comments:**

## NH 123 and Upper Walpole Road intersection

Representative Montgomery asked about intersection of Route 123 and Upper Walpole Road that is approximately 1000 feet south of the bridge. John Butler looked at different options to improve this intersection they were as follows:

- Bring NH 123 into a Tee intersection with Upper Walpole Road. NH 123 to the north would have a through movement onto Upper Walpole Road. Bank excavation would be required of property in the northeast quadrant of the intersection.
- Make NH 123 a free flow movement and tee Upper Walpole Road into NH 123. This
  option also requires bank excavation of the property in the northeast quadrant of the
  intersection.
- Either option requires approximately \$200,000.00, which is not funded under FEMA participating.

John then asked for the public's perception of the intersection since the accidents shown in the State's records are low and funding is an issue.

The Walpole Fire Department noted 12 to 15 minor accidents in past five years.

Under the proposals, if a driver is on NH 123 northbound going towards the intersection with Upper Walpole Road, is there a proposed turning lane to Upper Walpole Road? John Butler stated not at this time.

The Road agent said there were many near misses at the intersection and one person recommended drainage improvements. Bob Landry directed that comment to Doug Graham. District 4 will investigate the drainage issue at the intersection.

Another person suggested that the intersection topic be tabled until the new bridge is built and traffic patterns are back to normal, especially since there is a new retail establishment that will increase flow.

## NH 123 Cold River Bridge replacement

Charles Montgomery, Cold River Advisory, asked how deep was bedrock depth. Steve Boyington said 36' to 40' below ground surface based on the borings.

Follow up question: How much area under openings?

Arches – 115' wide 18' high. Butted concrete boxes – 100' long. Arches have slightly less area.

*Mr. Lund asked about form liners with regards to the proposed arch bridge option.* Bob Landry stated that form liners would be used to cast the headwalls.

The Fire Department said 50% of the bridge users are trucks headed to Cold River Materials. Is one option superior in its ability to carry load? Steve Boyington indicated that NHDOT designs all bridges to the same load capacity that is 125% greater than the national standard.

What would it take to put in a temporary bridge this year? ROW impacts for whatever alignment was selected to install the temporary bridge on and the additional cost.

Jerry from Acworth: The first NHDOT engineer designed the Walpole bridge. Perhaps original stones could be cast into new bridge? He also suggested a laminated timber span. Bob Landry stated that the Town never asked about timber. Gravel operation nearby might be an issue. Department pursued the

butted concrete box option in case Walpole residents did not want a structure similar to what was there. This option would also eliminate the need for a pier in the river.

Jerry said that he had heard (correctly or incorrectly) that blockage caused the issue. Could there be a maintenance program that clears bridge openings every 25 years? Bob Landry stated that the wetland permit process along with funding makes it difficult to do maintenance in the river.

Another man voiced support for dressing up the south face of bridge. State should care about aesthetics.

A lifelong Walpole resident is not concerned with aesthetics. Just get a bridge built.

Mr. Lund said that ice has jammed the Cold River from its junction with the Connecticut River. Is either bridge option any better at resisting ice forces? Steve Boyington stated that both designs will consider ice loading.

On the downstream side of the bridge on the Wood's property, the Fire Department has had fire access. Is it possible to continue? Bob Landry stated that we need permission from the landowner, but we will pursue.

Is one of the bridge replacement options faster to build? Butted Box is probably quicker to erect since there is no pier in the middle.

Does FEMA have façade stipulations? Bob Landry stated that FEMA does not, only that we do the least environmentally damaging practicable alternative.

Jerry asked if the timber option was going to be considered. The Town was asked if they wanted this pursued and they answered, they did not.

Representative Sawyer asked about time frame for the project. Bob Landry explained the Department's goal is to build it during the 2007 construction season if property owners are willing to provide right-of-entries or if negotiation go smoothly without the need for a Public Hearing.

An Upper Walpole Road resident expressed his hope that the bridge will be done sooner rather than later to remove some of the traffic from the detour route.

Why has it taken so long and how long will it take to build? She also voiced concern over additional NH 12 traffic. Bob Landry stated that extra survey at Upper Walpole Road and time for FEMA concurrence has delayed the project. If the project is able to be advertised in the spring, construction should be done in November 2007 with the road back open.

### What's next

Bob Landry requested that the selectman provide him with a letter stating the Town's structure preference.

Bob Landry of the NH DOT requests Right of Entry from 3 landowners, which allows us to start. Then NHDOT applies for environmental permits. If we can do this without a hearing we will be there in the spring. If a hearing is required, the bridge will not be constructed until the 2008 construction season.

Submitted by:

Dave Scott, P.E.

BLR/DS/kjr

NOTED BY: R. Landry, S. Boyington, and K. Nyhan

cc: Town of Walpole, District 4, and Bill Cass

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Project: Walpole

Location NH 123 bridge over Cold River Project No.'s (Federal) (State) 14540U
Public Informational/Officials Meeting, June 28, 2006

Name	Agency	Comments
Nicolas Bosonetto	Southwest Region	
	Planning Commission	
Perley B Lund	G	
Perley B Lund Jr.		
Heather Hamel	WMUR News 9	
Charles Miller	Walpole Gov.	
Whitney Aldrich	Walpole Gov.	
Sheldon Sawyer	State Rep.	
	Selectman	As fast as possible with
		double arch and form liners
Thomas Fitzgerald		
Sue Fitzgerald		
Mary Lou Montgomery		
Charles H. Montgomery	Cold River Local	
	Advisory Committee	
	Rep. from Walpole	
David L. Scott	NHDOT	
Heidi Konesko	WDA-NRCS	
Gretchen Hurlburt		
Doug Graham	NHDOT District 4	
James Terrell	Walpole Highway	
Dick Hurlburt	Walpole Fire Dept.	
Herb Hurlburt	Walpole Fire Dept.	
Bruce A. Bellows	Alstead Hist. Soc.	
Cathy MacDonald	Cold River LAC	
Scott Decker	NHFGD	
John McGuirk	Upper Walpole Rd. Resident	We need the bridge ASAP
Connie Adams-McGuirk	Upper Walpole Rd. Resident	
Jane Johnson		
Ben Daviss	Valley Rd. Resident &	
	Walpole Planning Board	
Don Jennison	Upper Walpole Rd.	need to get heavy trucks off
	Resident	upper Walpole
Edward Nachajski	Upper Walpole Rd.	would like to see less traffic
T. 5. 11		on Upper Walpole Rd.
Jim Dockham	Upper Walpole Rd.	Upper Walpole Rd. has become
		dangerous both to live on& drive
D : C1	100/11 W 1 1 D 1	it because of the volume & speed
Denise Gale	123/ Upper Walpole Rd.	
Tim Brady	123 Upper Walpole Rd.	
Gerald Brady	No. Walpole	W1T-1IV'' 11 A 1
Gerald DeMiro	Heritage Mills	Wood Technology Utilizing old Arch

S. Acworth Historic Resources

Rocks or Utilizing old rocks cast into concrete arch